COST ESTIMATES

Bruhat Bangalore Mahanagara Palike

Name of Work: Improvements to roads and drains at Palanahalli and surrounding area in Ward No 05 Byatarayanapura sub division

Est Cost: =300.00Lakhs

Sl No	Description of Items	No	Length m	Width m	Depth m	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5=69.80								
	Basic rate	130.00							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	199.80							
	6% AW	11.99							
	Total	211.79							
	Desilt								
	DMK Layout								
	W0433	2	340.00	0.60	0.35	142.80			
	Kempegowda Layout								
	W0423	2	225.00	0.60	0.35	94.50			
	WA273	2	125.00	0.60	0.35	52.50			
	WB273	2	101.00	0.60	0.35	42.42			
	Palanahalli lake surroundings								
	W0423	2	235.00	0.60	0.35	98.70			
	WA182	2	160.00	0.60	0.35	67.20			
	WF425	2	105.00	0.60	0.35	44.10			
	WE425	2	105.00	0.60	0.35	44.10			
	WD425	2	105.00	0.60	0.35	44.10			
	WC425	2	295.00	0.60	0.35	123.90			
	WB182	2	150.00	0.60	0.35	63.00			
	W0127	2	110.00	0.60	0.35	46.20			
	W0129	2	200.00	0.60	0.35	84.00			
	Kuvempunagara								
	W0267	2	115.00	0.60	0.35	48.30			
	W0128	2	110.00	0.60	0.35	46.20			
	W0271	2	70.00	0.60	0.35	29.40			
	W0132	2	100.00	0.60	0.35	42.00			
	WA132	2	100.00	0.60	0.35	42.00			
	W0257	2	175.00	0.60	0.35	73.50			
	W0134	2	175.00	0.60	0.35	73.50			
	W0138	2	155.00	0.60	0.35	65.10			
	W0140	2	175.00	0.60	0.35	73.50			
	Cross Road	2	65.00	0.60	0.35	27.30			
	W0257	2	126.00	0.60	0.35	52.92			
	W0259	2	500.00	0.60	0.35	210.00			
	Someshwara Layout								
	Cross Road	2	160.00	0.60	0.35	67.20			
	Cross Road	2	258.00	0.60	0.35	108.36			
	Culverts								
	Cross Culverts	3	6.00	0.80	0.80	11.52			
	RCC Culvert								
	New Culverts	1	6.00	1.40	1.15	9.66			
						1,927.98	**Cum**	**211.79**	**408326.88**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27, I.No.5.33 of PW, P&IWTD SR 2018-19)								
	Basic rate	105.00							
	6% AW	6.30							
	Total	111.30							

	Desilt								
	DMK Layout								
	W0433	2	340.00	1.35		918.00			
	Kempegowda Layout								
	W0423	2	225.00	1.35		607.50			
	WA273	2	125.00	1.35		337.50			
	WB273	2	101.00	1.35		272.70			
	Palanahalli lake surroundings								
	W0423	2	235.00	1.35		634.50			
	WA182	2	160.00	1.35		432.00			
	WF425	2	105.00	1.35		283.50			
	WE425	2	105.00	1.35		283.50			
	WD425	2	105.00	1.35		283.50			
	WC425	2	295.00	1.35		796.50			
	WB182	2	150.00	1.35		405.00			
	W0127	2	110.00	1.35		297.00			
	W0129	2	200.00	1.35		540.00			
	Kuvempunagara								
	W0267	2	115.00	1.35		310.50			
	W0128	2	110.00	1.35		297.00			
	W0271	2	70.00	1.35		189.00			
	W0132	2	100.00	1.35		270.00			
	WA132	2	100.00	1.35		270.00			
	W0257	2	175.00	1.35		472.50			
	W0134	2	175.00	1.35		472.50			
	W0138	2	155.00	1.35		418.50			
	W0140	2	175.00	1.35		472.50			
	Cross Road	2	65.00	1.35		175.50			
	W0257	2	126.00	1.35		340.20			
	W0259	2	500.00	1.35		1,350.00			
	Someshwara Layout								
	Cross Road	2	160.00	1.35		432.00			
	Cross Road	2	258.00	1.35		696.60			
	Culvert Slab	3	6.00	1.50		27.00			
						12,285.00			
	Consider 15%					1,842.75			
	deduct damaged / missing slab 10%					-184.28			
						1,658.48	**Sqm**	**111.30**	**184588.27**
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.27, I.No.5.31.1 of PW, P&IWTD SR 2018-19)								
	Basic rate	700.00							
	6% AW	42.00							
	Sub Total	742.00							
	Add damaged / missing slab 10%					184.28			
						184.28	**Sqm**	**742.00**	**136732.05**
4	KSRRB M2900-1. Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour, HOM complete as per specifications. MORTH Specification No. 408 (P.No.254, I.No.34.1 of PW,P&IWTD S.R 2018-19)								
	Basic rate	4226.00							
	6% AW	253.56							
	Sub Total	4479.56							
	RCC Culvert								
	New Culverts	1	6.00	1.40	0.15	1.26			
						1.26	**Cum**	**4479.56**	**5,644.25**

5	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications. KBS 5.1.13. cement mortar 1:6(P.No.255, I.No.34.8.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	4596.00							
	6% AW	275.76							
	Sub Total	4871.76							
	Raising of Culverts	6	6.00	0.45	0.45	7.29			
						7.29	**Cum**	**4871.76**	**35,515.13**
6	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM, curing complete as per specifications.Specification No. KBS 4.1, 4.2(P.No 255, I.No.34.11 of PW,P&IWTD S.R 2018-19)								
	Basic rate	5283.00							
	6% AW	316.98							
	Sub Total	5599.98							
	Flagging Course								
	Raising of Culverts	6	6.00	0.45	0.10	1.62			
						1.62	**Cum**	**5599.98**	**9,071.97**
7	34.17 Providing and laying in position plain/Reinforced cement cement concrete M20 for sub structure/Superstructure works, with cement @ 320 kgs, 20 mm & down size graded granite metal coarse aggregate @ 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticisers @ 3 lts confirming to IS 9103-2008,concrete laid in layers, well compacted and providing weep holes wherever necessary. with necessary scaffolding, form work etc., including cost of labour, HOM curing etc., complete. (P.No.257, I.No.34.17 of PW, P&IWTD SR 2018-19)								
	Basic rate	4979.00							
	6% AW	298.74							
	Sub Total	5277.74							
	Raft								
	RCC Culvert								
	New Culverts	1	6.00	1.20	0.20	1.44			
	Side Wall								
	RCC Culvert								
	New Culverts	2	6.00	0.20	0.80	1.92			
						3.36	**Cum**	**5277.74**	**17,733.21**
8	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200.**TMT Bars Fe 500** (P.No.229, I.No.28.8.2 of PW, P&IWTD SR 2018-19)								
	Basic rate	68233.00							
	6% AW	4093.98							
	Sub Total	72326.98							
	Consider 80kg/Cum for Culvert	1	3.36	80.00		0.27			
						0.27	**Tonne**	**72326.98**	**19,528.28**
9	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Data rate	5418.00							
	RCC Culvert								
	New Culverts	1	6.00	1.20		7.20			
	Damaged Slabs	5	6.00	1.50		45.00			
						52.20	**Sqm**	**5418.00**	**282819.60**

10	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301with 4km lead= (I No-19.14,P No-143)								
	Basic rate	41.00							
	5Km lead & Lift= (2*1.28*4)	10.24							
	Sub Total	51.24							
	6% AW	3.07							
	Total	54.31							
	Road Works								
	kattigenahalli to kogilu rd W0435	2	435.00	1.20	0.30	313.20			
	Baba nagar 2nd Mn Rd	2	235.00	1.20	0.30	169.20			
	DMK Layout								
	W0433	1	340.00	5.50	0.30	561.00			
	Kempegowda Layout								
	W0423	1	225.00	7.50	0.30	506.25			
	WA273	1	125.00	7.50	0.30	281.25			
	WB273	1	101.00	7.50	0.30	227.25			
	Palanahalli lake surroundings								
	W0423	1	235.00	5.50	0.30	387.75			
	WA182	1	160.00	5.50	0.30	264.00			
	WF425	1	105.00	5.50	0.30	173.25			
	WE425	1	105.00	5.50	0.30	173.25			
	WD425	1	105.00	5.50	0.30	173.25			
	WC425	1	295.00	5.50	0.30	486.75			
	WB182	1	150.00	5.50	0.30	247.50			
	W0127	1	110.00	5.50	0.30	181.50			
	W0129	1	200.00	5.50	0.30	330.00			
	Kuvempunagara								
	W0267	2	115.00	1.20	0.30	82.80			
	W0128	2	110.00	1.20	0.30	79.20			
	W0271	2	70.00	1.20	0.30	50.40			
	W0132	2	100.00	1.20	0.30	72.00			
	WA132	2	100.00	1.20	0.30	72.00			
	W0257	2	175.00	1.20	0.30	126.00			
	W0134	2	175.00	1.20	0.30	126.00			
	W0138	2	155.00	1.20	0.30	111.60			
	W0140	2	175.00	1.20	0.30	126.00			
	Cross Road	2	65.00	1.20	0.30	46.80			
	W0257	2	126.00	1.20	0.30	90.72			
	W0259	2	500.00	1.20	0.30	360.00			
	Someshwara Layout								
	Cross Road	1	160.00	5.00	0.30	240.00			
	Cross Road	1	258.00	5.00	0.30	387.00			
						6,445.92	**Cum**	**54.31**	**350077.92**
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Basic rate	1888.00							
	6% AW	113.28							
	Sub Total	2001.28							
	Road Works								

	kattigenahalli to kogilu rd W0435	2	435.00	1.20	0.25	261.00			
	Baba nagar 2nd Mn Rd	2	235.00	1.20	0.25	141.00			
	DMK Layout								
	W0433	1	340.00	5.50	0.25	467.50			
	Kempegowda Layout								
	W0423	1	225.00	7.50	0.25	421.88			
	WA273	1	125.00	7.50	0.25	234.38			
	WB273	1	101.00	7.50	0.25	189.38			
	Palanahalli lake surroundings								
	W0423	1	235.00	5.50	0.25	323.13			
	WA182	1	160.00	5.50	0.25	220.00			
	WF425	1	105.00	5.50	0.25	144.38			
	WE425	1	105.00	5.50	0.25	144.38			
	WD425	1	105.00	5.50	0.25	144.38			
	WC425	1	295.00	5.50	0.25	405.63			
	WB182	1	150.00	5.50	0.25	206.25			
	W0127	1	110.00	5.50	0.25	151.25			
	W0129	1	200.00	5.50	0.25	275.00			
	Kuvempunagara								
	W0267	2	115.00	1.20	0.25	69.00			
	W0128	2	110.00	1.20	0.25	66.00			
	W0271	2	70.00	1.20	0.25	42.00			
	W0132	2	100.00	1.20	0.25	60.00			
	WA132	2	100.00	1.20	0.25	60.00			
	W0257	2	175.00	1.20	0.25	105.00			
	W0134	2	175.00	1.20	0.25	105.00			
	W0138	2	155.00	1.20	0.25	93.00			
	W0140	2	175.00	1.20	0.25	105.00			
	Cross Road	2	65.00	1.20	0.25	39.00			
	W0257	2	126.00	1.20	0.25	75.60			
	W0259	2	500.00	1.20	0.25	300.00			
	Someshwara Layout								
	Cross Road	1	160.00	5.00	0.25	200.00			
	Cross Road	1	258.00	5.00	0.25	322.50			
						5,371.60	**Cum**	**2001.28**	**10750075.65**
12	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.158, I.No.21.6 of PW,P&IWTD SR 2018-19)								
	Basic rate	27							
	6% AW	1.62							
	Sub Total	28.62							
	Road Works								
	kattigenahalli to kogilu rd W0435	2	435.00	1.20		1,044.00			
	Baba nagar 2nd Mn Rd	2	235.00	1.20		564.00			
	DMK Layout								
	W0433	1	340.00	5.50		1,870.00			
	Kempegowda Layout								
	W0423	1	225.00	7.50		1,687.50			
	WA273	1	125.00	7.50		937.50			
	WB273	1	101.00	7.50		757.50			
	Palanahalli lake surroundings								
	W0423	1	235.00	5.50		1,292.50			
	WA182	1	160.00	5.50		880.00			
	WF425	1	105.00	5.50		577.50			
	WE425	1	105.00	5.50		577.50			
	WD425	1	105.00	5.50		577.50			

	WC425	1	295.00	5.50		1,622.50			
	WB182	1	150.00	5.50		825.00			
	W0127	1	110.00	5.50		605.00			
	W0129	1	200.00	5.50		1,100.00			
	Kuvempunagara								
	W0267	2	115.00	1.20		276.00			
	W0128	2	110.00	1.20		264.00			
	W0271	2	70.00	1.20		168.00			
	W0132	2	100.00	1.20		240.00			
	WA132	2	100.00	1.20		240.00			
	W0257	2	175.00	1.20		420.00			
	W0134	2	175.00	1.20		420.00			
	W0138	2	155.00	1.20		372.00			
	W0140	2	175.00	1.20		420.00			
	Cross Road	2	65.00	1.20		156.00			
	W0257	2	126.00	1.20		302.40			
	W0259	2	500.00	1.20		1,200.00			
	Someshwara Layout								
	Cross Road	1	160.00	5.00		800.00			
	Cross Road	1	258.00	5.00		1,290.00			
					Sub Total	21,486.40			
						21,486.40	**Sqm**	**28.62**	**614940.77**
13	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.158, I.No.21.2 of PW,P&IWTD SR 2018-19)								
	Basic rate	5.00							
	Area Weightage 6%	0.30							
	Final Rate	5.30							
	Road Works								
	kattigenahalli to kogilu rd W0435	1	435.00	9.00		3,915.00			
	Baba nagar 2nd Mn Rd	1	235.00	5.50		1,292.50			
	Kuvempunagara								
	W0267	1	115.00	5.00		575.00			
	W0128	1	110.00	5.00		550.00			
	W0271	1	70.00	4.80		336.00			
	W0132	1	100.00	4.50		450.00			
	WA132	1	100.00	4.60		460.00			
	W0257	1	175.00	5.00		875.00			
	W0134	1	175.00	5.00		875.00			
	W0138	1	155.00	4.80		744.00			
	W0140	1	175.00	4.50		787.50			
	Cross Road	1	65.00	4.60		299.00			
	W0257	1	126.00	5.00		630.00			
	W0259	1	500.00	5.50		2,750.00			
	deduct prime coat					-6,086.40			
						8,452.60	**Sqm**	**5.30**	**44,798.78**
14	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.158 I.No.21.7 of PW,P&IWTD SR of 2018-19)								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Final Rate	12.72							
	Tack Coat For DBM								
	DBM								
	Road Works								

	kattigenahalli to kogilu rd W0435	2	435.00	1.20		1,044.00			
	Baba nagar 2nd Mn Rd	2	235.00	1.20		564.00			
	Kuvempunagara								
	W0267	2	115.00	1.20		276.00			
	W0128	2	110.00	1.20		264.00			
	W0271	2	70.00	1.20		168.00			
	W0132	2	100.00	1.20		240.00			
	WA132	2	100.00	1.20		240.00			
	W0257	2	175.00	1.20		420.00			
	W0134	2	175.00	1.20		420.00			
	W0138	2	155.00	1.20		372.00			
	W0140	2	175.00	1.20		420.00			
	Cross Road	2	65.00	1.20		156.00			
	W0257	2	126.00	1.20		302.40			
	W0259	2	500.00	1.20		1,200.00			
	Tack Coat For BC								
	Road Works								
	kattigenahalli to kogilu rd W0435	1	435.00	9.00		3,915.00			
	Baba nagar 2nd Mn Rd	1	235.00	5.50		1,292.50			
	DMK Layout								
	W0433	1	340.00	5.50		1,870.00			
	Kempegowda Layout								
	W0423	1	225.00	7.50		1,687.50			
	WA273	1	125.00	7.50		937.50			
	WB273	1	101.00	7.50		757.50			
	Palanahalli lake surroundings								
	W0423	1	235.00	5.50		1,292.50			
	WA182	1	160.00	5.50		880.00			
	WF425	1	105.00	5.50		577.50			
	WE425	1	105.00	5.50		577.50			
	WD425	1	105.00	5.50		577.50			
	WC425	1	295.00	5.50		1,622.50			
	WB182	1	150.00	5.50		825.00			
	W0127	1	110.00	5.50		605.00			
	W0129	1	200.00	5.50		1,100.00			
	Kuvempunagara								
	W0267	1	115.00	5.00		575.00			
	W0128	1	110.00	5.00		550.00			
	W0271	1	70.00	4.80		336.00			
	W0132	1	100.00	4.50		450.00			
	WA132	1	100.00	4.60		460.00			
	W0257	1	175.00	5.00		875.00			
	W0134	1	175.00	5.00		875.00			
	W0138	1	155.00	4.80		744.00			
	W0140	1	175.00	4.50		787.50			
	Cross Road	1	65.00	4.60		299.00			
	W0257	1	126.00	5.00		630.00			
	W0259	1	500.00	5.50		2,750.00			
	Someshwara Layout								
	Cross Road	1	160.00	5.00		800.00			
	Cross Road	1	258.00	5.00		1,290.00			
						36,025.40	**Sqm**	**12.72**	**458243.09**

15	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	6224.00							
	6% AW	373.44							
	Sub Total	6597.44							
	DBM								
	Road Works								
	kattigenahalli to kogilu rd W0435	2	435.00	1.20	0.05	52.20			
	Baba nagar 2nd Mn Rd	2	235.00	1.20	0.05	28.20			
	Kuvempunagara								
	W0267	2	115.00	1.20	0.05	13.80			
	W0128	2	110.00	1.20	0.05	13.20			
	W0271	2	70.00	1.20	0.05	8.40			
	W0132	2	100.00	1.20	0.05	12.00			
	WA132	2	100.00	1.20	0.05	12.00			
	W0257	2	175.00	1.20	0.05	21.00			
	W0134	2	175.00	1.20	0.05	21.00			
	W0138	2	155.00	1.20	0.05	18.60			
	W0140	2	175.00	1.20	0.05	21.00			
	Cross Road	2	65.00	1.20	0.05	7.80			
	W0257	2	126.00	1.20	0.05	15.12			
	W0259	2	500.00	1.20	0.05	60.00			
						304.32	**Cum**	**6597.44**	**2007732.94**
16	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No.171, I.No.21.78.12 of PW,P&IWTD SR 2018-19) As per Issue rate dated: 03/01/2020								
	Basic rate (Issue Rate)	7315.00							
	6% AW	438.90							
	Sub Total	7753.90							
	Road Works								
	kattigenahalli to kogilu rd W0435	1	435.00	9.00	0.04	156.60			
	Baba nagar 2nd Mn Rd	1	235.00	5.50	0.04	51.70			
	DMK Layout								
	W0433	1	340.00	5.50	0.04	74.80			
	Kempegowda Layout								
	W0423	1	225.00	7.50	0.04	67.50			
	WA273	1	125.00	7.50	0.04	37.50			
	WB273	1	101.00	7.50	0.04	30.30			
	Palanahalli lake surroundings								
	W0423	1	235.00	5.50	0.04	51.70			
	WA182	1	160.00	5.50	0.04	35.20			
	WF425	1	105.00	5.50	0.04	23.10			
	WE425	1	105.00	5.50	0.04	23.10			
	WD425	1	105.00	5.50	0.04	23.10			
	WC425	1	295.00	5.50	0.04	64.90			
	WB182	1	150.00	5.50	0.04	33.00			
	W0127	1	110.00	5.50	0.04	24.20			

	W0129	1	200.00	5.50	0.04	44.00			
	Kuvempunagara								
	W0267	1	115.00	5.00	0.04	23.00			
	W0128	1	110.00	5.00	0.04	22.00			
	W0271	1	70.00	4.80	0.04	13.44			
	W0132	1	100.00	4.50	0.04	18.00			
	WA132	1	100.00	4.60	0.04	18.40			
	W0257	1	175.00	5.00	0.04	35.00			
	W0134	1	175.00	5.00	0.04	35.00			
	W0138	1	155.00	4.80	0.04	29.76			
	W0140	1	175.00	4.50	0.04	31.50			
	Cross Road	1	65.00	4.60	0.04	11.96			
	W0257	1	126.00	5.00	0.04	25.20			
	W0259	1	500.00	5.50	0.04	110.00			
	Someshwara Layout								
	Cross Road	1	160.00	5.00	0.04	32.00			
	Cross Road	1	258.00	5.00	0.04	51.60			
						1,197.56	**Cum**	**7753.90**	**9285760.48**
17	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	6% AW	25.74							
	Sub Total	454.74							
	Center Line	0.50	5,210.00	0.10		260.50			
	Edge Line	2.00	4,645.00	0.10		929.00			
						1,189.50	**Sqm**	**454.74**	**540913.23**
							Total Construction Cost		**25152502.49**
18							**12% GST to Construction Cost**		**3018300.30**
19							**5% Tender Premium**		**1257625.12**
20						**Cost towards Preparation of DPR LS**			**281709.00**
21						**Cost towards PMC / Third Party inspection LS**			**281709.00**
								Sub Total	**29991845.91**
22						**Miscellaneous and rounding off**			**8,154.09**
								TOTAL	**30000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates

Tejus Consultants

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer,
BBMP Bangalore

Executive Engineer
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike

Name of Work: Improvements to roads and drains at Chokkanahalli and surrounding area in Ward No 05 Byatarayanapura sub division

Est Cost: =200.00Lakhs

Sl No	Description of Items	No	Length m	Width m	Depth m	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5=69.80								
	Basic rate	130.00							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	199.80							
	6% AW	11.99							
	Total	211.79							
	Desilt								
	W1611	2	140.00	0.60	0.35	58.80			
	W1605	1	140.00	0.60	0.35	29.40			
	W1605	1	170.00	0.60	0.35	35.70			
	W1601	1	75.00	0.60	0.35	15.75			
	W1603	1	150.00	0.60	0.35	31.50			
	W1599	1	175.00	0.60	0.35	36.75			
	W0902	2	85.00	0.60	0.35	35.70			
		2	225.00	0.60	0.35	94.50			
	W1585	2	80.00	0.60	0.35	33.60			
	W1587	2	100.00	0.60	0.35	42.00			
	W1579	2	65.00	0.60	0.35	27.30			
	W1577	2	50.00	0.60	0.35	21.00			
	W1607	2	150.00	0.60	0.35	63.00			
	Cross road 1	2	40.00	0.60	0.35	16.80			
	Cross road 2	2	20.00	0.60	0.35	8.40			
	W1357	2	60.00	0.60	0.35	25.20			
	W1353	2	105.00	0.60	0.35	44.10			
	WA1353	2	60.00	0.60	0.35	25.20			
	W1349	2	100.00	0.60	0.35	42.00			
	W1343	2	100.00	0.60	0.35	42.00			
	W1337	2	100.00	0.60	0.35	42.00			
	W1331	2	110.00	0.60	0.35	46.20			
	W1347	2	140.00	0.60	0.35	58.80			
	W1345	2	150.00	0.60	0.35	63.00			
	W1237	2	160.00	0.60	0.35	67.20			
	Basavalingapura								
	W1108	2	330	0.60	0.35	138.60			
	W1114	2	100	0.60	0.35	42.00			
	W1118	2	110	0.60	0.35	46.20			
	W2015	2	200	0.60	0.35	84.00			
	W1116	2	80	0.60	0.35	33.60			
	W1124	2	160	0.60	0.35	67.20			
	W2001	2	168	0.60	0.35	70.56			
	Culverts								
	Cross Culverts	2	6.00	0.80	0.80	7.68			
	RCC Culvert								
	New Culverts	2	7.00	1.40	1.15	22.54			
						1518.28	**Cum**	**211.79**	**321556.52**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27, I.No.5.33 of PW, P&IWTD SR 2018-19)								
	Basic rate	105.00							
	6% AW	6.30							
	Total	111.30							
	Desilt								

	W1611	1	140.00	1.35		189.00			
	W1605	1	140.00	1.35		189.00			
	W1605	1	170.00	1.35		229.50			
	W1601	1	75.00	1.35		101.25			
	W1603	1	150.00	1.35		202.50			
	W1599	1	175.00	1.35		236.25			
	W0902	2	85.00	1.35		229.50			
		2	225.00	1.35		607.50			
	W1585	2	80.00	1.35		216.00			
	W1587	2	100.00	1.35		270.00			
	W1579	2	65.00	1.35		175.50			
	W1577	2	50.00	1.35		135.00			
	W1607	2	150.00	1.35		405.00			
	Cross road 1	2	40.00	1.35		108.00			
	Cross road 2	2	20.00	1.35		54.00			
	W1357	2	60.00	1.35		162.00			
	W1353	2	105.00	1.35		283.50			
	WA1353	2	60.00	1.35		162.00			
	W1349	2	100.00	1.35		270.00			
	W1343	2	100.00	1.35		270.00			
	W1337	2	100.00	1.35		270.00			
	W1331	2	110.00	1.35		297.00			
	W1347	2	140.00	1.35		378.00			
	W1345	2	150.00	1.35		405.00			
	W1237	2	160.00	1.35		432.00			
	Basavalingapura								
	W1108	2	330.00	1.35		891.00			
	W1114	2	100.00	1.35		270.00			
	W1118	2	110.00	1.35		297.00			
	W2015	2	200.00	1.35		540.00			
	W1116	2	80.00	1.35		216.00			
	W1124	2	160.00	1.35		432.00			
	W2001	2	168.00	1.35		453.60			
	Culverts								
	Cross Culverts	2	6.00	1.35		16.20			
	Culvert Slab	2	6.00	1.50		18.00			
						9411.30			
	Consider 15%					**1411.70**			
	deduct damaged / missing slab 10%					-141.17			
						1270.53	**Sqm**	**111.30**	**141409.49**
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.27, I.No.5.31.1 of PW, P&IWTD SR 2018-19)								
	Basic rate	700.00							
	6% AW	42.00							
	Sub Total	742.00							
	Add damaged / missing slab 10%					141.17			
						141.17	**Sqm**	**742.00**	**104747.77**
4	KSRRB M2900-1. Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour, HOM complete as per specifications. MORTH Specification No. 408 (P.No.254, I.No.34.1 of PW,P&IWTD S.R 2018-19)								
	Basic rate	4226.00							
	6% AW	253.56							
	Sub Total	4479.56							
	RCC Culvert								
	New Culverts	2	7.00	1.40	0.15	2.94			
						2.94	**Cum**	**4479.56**	**13,169.91**

5	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications. KBS 5.1.13. cement mortar 1:6(P.No.255, I.No.34.8.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	4596.00							
	6% AW	275.76							
	Sub Total	4871.76							
	Raising of Culverts	4	6.00	0.45	0.45	4.86			
						4.86	**Cum**	**4871.76**	**23,676.75**
6	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM, curing complete as per specifications.Specification No. KBS 4.1, 4.2(P.No 255, I.No.34.11 of PW,P&IWTD S.R 2018-19)								
	Basic rate	5283.00							
	6% AW	316.98							
	Sub Total	5599.98							
	Flagging Course								
	Raising of Culverts	4	6.00	0.45	0.100	1.08			
						1.08	**Cum**	**5599.98**	**6,047.98**
7	34.17 Providing and laying in position plain/Reinforced cement cement concrete M20 for sub structure/Superstructure works, with cement @ 320 kgs, 20 mm & down size graded granite metal coarse aggregate @ 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticisers @ 3 lts confirming to IS 9103-2008,concrete laid in layers, well compacted and providing weep holes wherever necessary. with necessary scaffolding, form work etc., including cost of labour, HOM curing etc., complete. (P.No.257, I.No.34.17 of PW, P&IWTD SR 2018-19)								
	Basic rate	4979							
	6% AW	298.74							
	Sub Total	5277.74							
	Raft								
	RCC Culvert								
	New Culverts	2	7.00	1.20	0.20	3.36			
	Side Wall								
	RCC Culvert								
	New Culverts	4	7.00	0.20	0.80	4.48			
						7.84	**Cum**	**5277.74**	**41,377.48**
8	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200.**TMT Bars Fe 500** (P.No.229, I.No.28.8.2 of PW, P&IWTD SR 2018-19)								
	Basic rate	68233.00							
	6% AW	4093.98							
	Sub Total	72326.98							
	Consider 80kg/Cum for Culvert	1	7.84	80.00		0.63			
						0.63	**Tonne**	**72326.98**	**45,566.00**
9	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Data rate	5418.00							
	RCC Culvert								
	New Culverts	2	7.00	1.20		16.80			
	Damaged Slabs	5	6.00	1.50		45.00			
						61.80	**Sqm**	**5418.00**	**334832.40**

10	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301with 4km lead= (I No-19.14,P No-143)								
	Basic rate	41.00							
	5Km lead & Lift= (2*1.28*4)	10.24							
	Sub Total	51.24							
	6% AW	3.07							
	Total	54.31							
	Road Works								
	W1611	2	140.00	1.20	0.30	100.80			
	W1605	1	140.00	5.50	0.30	231.00			
	W1605	2	170.00	1.20	0.30	122.40			
	W1601	2	75.00	1.20	0.30	54.00			
	W1603	2	150.00	1.20	0.30	108.00			
	W1599	2	175.00	1.20	0.30	126.00			
	W0902	2	85.00	1.20	0.30	61.20			
		2	225.00	1.20	0.30	162.00			
	W1585	1	80.00	5.50	0.30	132.00			
	W1587	1	100.00	5.50	0.30	165.00			
	W1579	1	65.00	5.50	0.30	107.25			
	W1577	1	50.00	5.50	0.30	82.50			
	W1607	2	150.00	1.20	0.30	108.00			
	Cross road 1	2	40.00	1.20	0.30	28.80			
	W1357	2	60.00	1.20	0.30	43.20			
	W1353	2	105.00	1.20	0.30	75.60			
	WA1353	2	60.00	1.20	0.30	43.20			
	W1349	2	100.00	1.20	0.30	72.00			
	W1343	2	100.00	1.20	0.30	72.00			
	W1337	2	100.00	1.20	0.30	72.00			
	W1331	2	110.00	1.20	0.30	79.20			
	W1347	2	140.00	1.20	0.30	100.80			
	W1345	2	150.00	1.20	0.30	108.00			
	W1237	2	160.00	1.20	0.30	115.20			
	Basavalingapura								
	W1108	2	330.00	1.20	0.30	237.60			
	W1114	2	100.00	1.20	0.30	72.00			
	W1118	2	110.00	1.20	0.30	79.20			
	W2015	2	200.00	1.20	0.30	144.00			
	W1116	2	80.00	1.20	0.30	57.60			
	W1124	2	160.00	1.20	0.30	115.20			
	W2001	2	168.00	1.20	0.30	120.96			
						3196.71	**Cum**	**54.31**	**173613.32**
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Basic rate	1888.00							
	6% AW	113.28							
	Sub Total	2001.28							
	Road Works								

	W1611	2	140.00	1.20	0.25	84.00			
	W1605	1	140.00	5.50	0.25	192.50			
	W1605	2	170.00	1.20	0.25	102.00			
	W1601	2	75.00	1.20	0.25	45.00			
	W1603	2	150.00	1.20	0.25	90.00			
	W1599	2	175.00	1.20	0.25	105.00			
	W0902	2	85.00	1.20	0.25	51.00			
		2	225.00	1.20	0.25	135.00			
	W1585	1	80.00	5.50	0.25	110.00			
	W1587	1	100.00	5.50	0.25	137.50			
	W1579	1	65.00	5.50	0.25	89.38			
	W1577	1	50.00	5.50	0.25	68.75			
	W1607	2	150.00	1.20	0.25	90.00			
	Cross road 1	2	40.00	1.20	0.25	24.00			
	W1357	2	60.00	1.20	0.25	36.00			
	W1353	2	105.00	1.20	0.25	63.00			
	WA1353	2	60.00	1.20	0.25	36.00			
	W1349	2	100.00	1.20	0.25	60.00			
	W1343	2	100.00	1.20	0.25	60.00			
	W1337	2	100.00	1.20	0.25	60.00			
	W1331	2	110.00	1.20	0.25	66.00			
	W1347	2	140.00	1.20	0.25	84.00			
	W1345	2	150.00	1.20	0.25	90.00			
	W1237	2	160.00	1.20	0.25	96.00			
	Basavalingapura								
	W1108	2	330.00	1.20	0.25	198.00			
	W1114	2	100.00	1.20	0.25	60.00			
	W1118	2	110.00	1.20	0.25	66.00			
	W2015	2	200.00	1.20	0.25	120.00			
	W1116	2	80.00	1.20	0.25	48.00			
	W1124	2	160.00	1.20	0.25	96.00			
	W2001	2	168.00	1.20	0.25	100.80			
						2663.93	**Cum**	**2001.28**	**5331269.83**
12	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.158, I.No.21.6 of PW,P&IWTD SR 2018-19)								
	Basic rate	27							
	6% AW	1.62							
	Sub Total	28.62							
	Road Works								
	W1611	2	140.00	1.20		336.00			
	W1605	1	140.00	5.50		770.00			
	W1605	2	170.00	1.20		408.00			
	W1601	2	75.00	1.20		180.00			
	W1603	2	150.00	1.20		360.00			
	W1599	2	175.00	1.20		420.00			
	W0902	2	85.00	1.20		204.00			
		2	225.00	1.20		540.00			
	W1585	1	80.00	5.50		440.00			
	W1587	1	100.00	5.50		550.00			
	W1579	1	65.00	5.50		357.50			
	W1577	1	50.00	5.50		275.00			
	W1607	2	150.00	1.20		360.00			
	Cross road 1	2	40.00	1.20		96.00			
	W1357	2	60.00	1.20		144.00			
	W1353	2	105.00	1.20		252.00			
	WA1353	2	60.00	1.20		144.00			
	W1349	2	100.00	1.20		240.00			
	W1343	2	100.00	1.20		240.00			
	W1337	2	100.00	1.20		240.00			
	W1331	2	110.00	1.20		264.00			
	W1347	2	140.00	1.20		336.00			
	W1345	2	150.00	1.20		360.00			
	W1237	2	160.00	1.20		384.00			
	Basavalingapura								
	W1108	2	330.00	1.20		792.00			

	W1114	2	100.00	1.20		240.00			
	W1118	2	110.00	1.20		264.00			
	W2015	2	200.00	1.20		480.00			
	W1116	2	80.00	1.20		192.00			
	W1124	2	160.00	1.20		384.00			
	W2001	2	168.00	1.20		403.20			
				Sub Total		10655.70			
						10655.70	Sqm	28.62	304966.13
13	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.158, I.No.21.2 of PW,P&IWTD SR 2018-19)								
	Basic rate	5.00							
	Area Weightage 6%	0.30							
	Final Rate	5.30							
	Road Works								
	W1611	1	140.00	5.50		770.00			
	W1605	1	140.00	5.50		770.00			
	W1605	1	170.00	5.50		935.00			
	W1601	1	75.00	5.50		412.50			
	W1603	1	150.00	5.50		825.00			
	W1599	1	175.00	5.00		875.00			
	W0902	1	85.00	5.50		467.50			
		1	225.00	5.50		1237.50			
	W1585	1	80.00	5.50		440.00			
	W1587	1	100.00	5.50		550.00			
	W1579	1	65.00	5.50		357.50			
	W1577	1	50.00	5.50		275.00			
	W1607	1	150.00	5.50		825.00			
	Cross road 1	1	40.00	5.50		220.00			
	W1357	1	60.00	4.50		270.00			
	W1353	1	105.00	5.50		577.50			
	WA1353	1	60.00	4.80		288.00			
	W1349	1	100.00	5.50		550.00			
	W1343	1	100.00	5.50		550.00			
	W1337	1	100.00	5.00		500.00			
	W1331	1	110.00	5.00		550.00			
	W1347	1	140.00	5.50		770.00			
	W1345	1	150.00	5.50		825.00			
	W1237	1	160.00	5.50		880.00			
	Basavalingapura								
	W1108	1	330.00	5.00		1650.00			
	W1114	1	100.00	4.50		450.00			
	W1118	1	110.00	5.50		605.00			
	W2015	1	200.00	5.50		1100.00			
	W1116	1	80.00	5.50		440.00			
	W1124	1	160.00	5.50		880.00			
	W2001	1	168.00	5.50		924.00			
	deduct prime coat					-10655.70			
						10113.80	Sqm	5.30	53,603.14
14	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.158 I.No.21.7 of PW,P&IWTD SR of 2018-19)								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Final Rate	12.72							
	Tack Coat For DBM								
	DBM								
	Road Works								
	W1611	2	140.00	1.20		336.00			
	W1605	2	170.00	1.20		408.00			
	W1601	2	75.00	1.20		180.00			
	W1603	2	150.00	1.20		360.00			

	W1599	2	175.00	1.20		420.00			
	W0902	2	85.00	1.20		204.00			
		2	225.00	1.20		540.00			
	W1607	2	150.00	1.20		360.00			
	Cross road 1	2	40.00	1.20		96.00			
	W1357	2	60.00	1.20		144.00			
	W1353	2	105.00	1.20		252.00			
	WA1353	2	60.00	1.20		144.00			
	W1349	2	100.00	1.20		240.00			
	W1343	2	100.00	1.20		240.00			
	W1337	2	100.00	1.20		240.00			
	W1331	2	110.00	1.20		264.00			
	W1347	2	140.00	1.20		336.00			
	W1345	2	150.00	1.20		360.00			
	W1237	2	160.00	1.20		384.00			
	Basavalingapura								
	W1108	2	330.00	1.20		792.00			
	W1114	2	100.00	1.20		240.00			
	W1118	2	110.00	1.20		264.00			
	W2015	2	200.00	1.20		480.00			
	W1116	2	80.00	1.20		192.00			
	W1124	2	160.00	1.20		384.00			
	W2001	2	168.00	1.20		403.20			
	Tack Coat For BC								
	Road Works								
	W1611	1	140.00	5.50		770.00			
	W1605	1	140.00	5.50		770.00			
	W1605	1	170.00	5.50		935.00			
	W1601	1	75.00	5.50		412.50			
	W1603	1	150.00	5.00		750.00			
	W1599	1	175.00	5.50		962.50			
	W0902	1	85.00	5.50		467.50			
		1	225.00	5.50		1237.50			
	W1585	1	80.00	5.50		440.00			
	W1587	1	100.00	5.00		500.00			
	W1579	1	65.00	5.50		357.50			
	W1577	1	50.00	5.50		275.00			
	W1607	1	150.00	5.50		825.00			
	Cross road 1	1	40.00	5.50		220.00			
	W1357	1	60.00	4.50		270.00			
	W1353	1	105.00	5.50		577.50			
	WA1353	1	60.00	4.80		288.00			
	W1349	1	100.00	5.50		550.00			
	W1343	1	100.00	5.50		550.00			
	W1337	1	100.00	5.00		500.00			
	W1331	1	110.00	5.00		550.00			
	W1347	1	140.00	5.50		770.00			
	W1345	1	150.00	5.50		825.00			
	W1237	1	160.00	5.50		880.00			
	Basavalingapura								
	W1108	1	330.00	5.00		1650.00			
	W1114	1	100.00	4.50		450.00			
	W1118	1	110.00	5.50		605.00			
	W2015	1	200.00	5.50		1100.00			
	W1116	1	80.00	5.50		440.00			
	W1124	1	160.00	5.50		880.00			
	W2001	1	168.00	5.50		924.00			
						28995.20	**Sqm**	**12.72**	**368818.94**
15	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	6224.00							

	6% AW	373.44							
	Sub Total	6597.44							
	DBM								
	Road Works								
	W1611	2	140.00	1.20	0.05	16.80			
	W1605	2	170.00	1.20	0.05	20.40			
	W1601	2	75.00	1.20	0.05	9.00			
	W1603	2	150.00	1.20	0.05	18.00			
	W1599	2	175.00	1.20	0.05	21.00			
	W0902	2	85.00	1.20	0.05	10.20			
		2	225.00	1.20	0.05	27.00			
	W1607	2	150.00	1.20	0.05	18.00			
	Cross road 1	2	40.00	1.20	0.05	4.80			
	W1357	2	60.00	1.20	0.05	7.20			
	W1353	2	105.00	1.20	0.05	12.60			
	WA1353	2	60.00	1.20	0.05	7.20			
	W1349	2	100.00	1.20	0.05	12.00			
	W1343	2	100.00	1.20	0.05	12.00			
	W1337	2	100.00	1.20	0.05	12.00			
	W1331	2	110.00	1.20	0.05	13.20			
	W1347	2	140.00	1.20	0.05	16.80			
	W1345	2	150.00	1.20	0.05	18.00			
	W1237	2	160.00	1.20	0.05	19.20			
	Basavalingapura								
	W1108	2	330.00	1.20	0.05	39.60			
	W1114	2	100.00	1.20	0.05	12.00			
	W1118	2	110.00	1.20	0.05	13.20			
	W2015	2	200.00	1.20	0.05	24.00			
	W1116	2	80.00	1.20	0.05	9.60			
	W1124	2	160.00	1.20	0.05	19.20			
	W2001	2	168.00	1.20	0.05	20.16			
						413.16	**Cum**	**6597.44**	**2725798.31**
16	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015, using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No.171, I.No.21.78.12 of PW,P&IWTD SR 2018-19) As per Issue rate dated: 03/01/2020								
	Basic rate (Issue Rate)	7315.00							
	6% AW	438.90							
	Sub Total	7753.90							
	Road Works								
	W1611	1	140.00	5.50	0.04	30.80			
	W1605	1	140.00	5.50	0.04	30.80			
	W1605	1	170.00	5.50	0.04	37.40			
	W1601	1	75.00	5.50	0.04	16.50			
	W1603	1	150.00	5.00	0.04	30.00			
	W1599	1	175.00	5.50	0.04	38.50			
	W0902	1	85.00	5.50	0.04	18.70			
		1	225.00	5.50	0.04	49.50			
	W1585	1	80.00	5.50	0.04	17.60			
	W1587	1	100.00	5.00	0.04	20.00			
	W1579	1	65.00	5.50	0.04	14.30			
	W1577	1	50.00	5.50	0.04	11.00			
	W1607	1	150.00	5.50	0.04	33.00			
	Cross road 1	1	40.00	5.50	0.04	8.80			
	W1357	1	60.00	4.50	0.04	10.80			
	W1353	1	105.00	5.50	0.04	23.10			
	WA1353	1	60.00	4.80	0.04	11.52			
	W1349	1	100.00	5.50	0.04	22.00			
	W1343	1	100.00	5.50	0.04	22.00			
	W1337	1	100.00	5.00	0.04	20.00			
	W1331	1	110.00	5.00	0.04	22.00			

	W1347	1	140.00	5.50	0.04	30.80			
	W1345	1	150.00	5.50	0.04	33.00			
	W1237	1	160.00	5.50	0.04	35.20			
	Basavalingapura								
	W1108	1	330.00	5.00	0.04	66.00			
	W1114	1	100.00	4.50	0.04	18.00			
	W1118	1	110.00	5.50	0.04	24.20			
	W2015	1	200.00	5.50	0.04	44.00			
	W1116	1	80.00	5.50	0.04	17.60			
	W1124	1	160.00	5.50	0.04	35.20			
	W2001	1	168.00	5.50	0.04	36.96			
						829.28	**Cum**	**7753.90**	**6430154.19**
17	**KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	6% AW	25.74							
	Sub Total	454.74							
	Center Line	0.50	3878.00	0.10		193.90			
	Edge line	2	2868.00	0.10		573.60			
						767.50	**Sqm**	**454.74**	**349012.95**
								Total Construction Cost	**16769621.12**
18								**12% GST to Construction Cost**	**2012354.53**
19								**5% Tender Premium**	**838481.06**
20								**Cost towards Preparation of DPR LS**	**187820.00**
21								**Cost towards PMC / Third Party inspection LS**	**187820.00**
								Sub Total	**19996096.71**
22								**Miscellaneous and rounding off**	**3,903.29**
								TOTAL	**20000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates

Tejus Consultants

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer,
BBMP Bangalore

Executive Engineer
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike

Name of Work: Improvements to roads and drains at Vinayakanagar andSurrounding area in Ward No 05

Byatarayanapura sub division

Est Cost: =300.00Lakhs

Sl No	Description of Items	No	Length m	Width m	Depth m	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5=69.80								
	Basic rate	130.00							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	199.80							
	6% AW	11.99							
	Total	211.79							
	Desilt								
	Muneshwara layout								
	WA037	2	105.00	0.60	0.35	44.10			
	Vijayanagar								
	WA019	2	630.00	0.60	0.35	264.60			
	W0020	2	145.00	0.60	0.35	60.90			
	W0016	2	105.00	0.60	0.35	44.10			
	W0014	2	80.00	0.60	0.35	33.60			
	W0010	2	95.00	0.60	0.35	39.90			
	W0008	2	70.00	0.60	0.35	29.40			
	W0006	2	85.00	0.60	0.35	35.70			
	STS Circle								
	W0349	2	160.00	0.60	0.35	67.20			
	W0024	2	110.00	0.60	0.35	46.20			
	W-Drive way road	2	230.00	0.60	0.35	96.60			
	7th Cross Road	2	220.00	0.60	0.35	92.40			
	Reva College Road								
	W0383	2	250.00	0.60	0.35	105.00			
	WA461	2	60.00	0.60	0.35	25.20			
	WA459	2	60.00	0.60	0.35	25.20			
	WA457	2	60.00	0.60	0.35	25.20			
	WD455	2	60.00	0.60	0.35	25.20			
	WK455	2	60.00	0.60	0.35	25.20			
	WC455	2	65.00	0.60	0.35	27.30			
	WB455	2	65.00	0.60	0.35	27.30			
	WA383	2	40.00	0.60	0.35	16.80			
	WB383	2	40.00	0.60	0.35	16.80			
	WA455	2	50.00	0.60	0.35	21.00			
	Olive Plant road								
	W0158	2	280.00	0.60	0.35	117.60			
	W0367	2	65.00	0.60	0.35	27.30			
	W0363	2	65.00	0.60	0.35	27.30			
	W0359	2	65.00	0.60	0.35	27.30			
	W0355	2	65.00	0.60	0.35	27.30			
	W0174	2	212.00	0.60	0.35	89.04			
	W0214	2	180.00	0.60	0.35	75.60			
	Cross Rd 1	2	187.00	0.60	0.35	78.54			
	Cross Rd 2	2	240.00	0.60	0.35	100.80			
	Culverts								
	Cross Culverts	4	6.00	0.80	0.80	15.36			
	RCC Culvert								
	New Culverts	2	7.00	1.40	1.15	22.54			
		2	6.00	1.40	1.15	19.32			
						1822.9	**Cum**	211.79	386071.991
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27, I.No.5.33 of PW, P&IWTD SR 2018-19)								
	Basic rate	105.00							
	6% AW	6.30							
	Total	111.30							
	Desilt								

	Muneshwara layout								
	WA037	2	105.00	1.35		283.5			
	Vijayanagar								
	WA019	2	630.00	1.35		1701			
	W0020	2	145.00	1.35		391.5			
	W0016	2	105.00	1.35		283.5			
	W0014	2	80.00	1.35		216			
	W0010	2	95.00	1.35		256.5			
	W0008	2	70.00	1.35		189			
	W0006	2	85.00	1.35		229.5			
	STS Circle								
	W0349	2	160.00	1.35		432			
	W0024	2	110.00	1.35		297			
	W-Drive way road	2	230.00	1.35		621			
	7th Cross Road	2	220.00	1.35		594			
	Reva College Road								
	W0383	2	250.00	1.35		675			
	WA461	2	60.00	1.35		162			
	WA459	2	60.00	1.35		162			
	WA457	2	60.00	1.35		162			
	WD455	2	60.00	1.35		162			
	WK455	2	60.00	1.35		162			
	WC455	2	65.00	1.35		175.5			
	WB455	2	65.00	1.35		175.5			
	WA383	2	40.00	1.35		108			
	WB383	2	40.00	1.35		108			
	WA455	2	50.00	1.35		135			
	Olive Plant road	0	0.00	1.35		0			
	W0158	2	280.00	1.35		756			
	W0367	2	65.00	1.35		175.5			
	W0363	2	65.00	1.35		175.5			
	W0359	2	65.00	1.35		175.5			
	W0355	2	65.00	1.35		175.5			
	W0174	2	212.00	1.35		572.4			
	W0214	2	180.00	1.35		486			
	Cross Rd 1	2	187.00	1.35		504.9			
	Cross Rd 2	2	240.00	1.35		648			
						11350.8			
	Consider 15%					1702.62			
	deduct damaged / missing slab 10%					-170.26			
						1532.358	**Sqm**	111.3	170551.4454
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.27, I.No.5.31.1 of PW, P&IWTD SR 2018-19)								
	Basic rate	700.00							
	6% AW	42.00							
	Sub Total	742.00							
	Add damaged / missing slab 10%					170.26			
						170.26	**Sqm**	742	126332.92
4	Removing and resetting of footpath slab (P.No.270, I.No.37.56 of PW, P&IWTD SR 2018-19)								
	Basic rate	197.00							
	6% AW	11.82							
	Total	208.82							
	Drain Cover								
	Culvert Slab	5	6.00	1.50		45.00			
						45.00	**Sqm**	208.82	9396.9
5	KSRRB M2900-1. Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour, HOM complete as per specifications. MORTH Specification No. 408 (P.No.254, I.No.34.1 of PW,P&IWTD S.R 2018-19)								
	Basic rate	4226.00							
	6% AW	253.56							
	Sub Total	4479.56							
	RCC Culvert								
	New Culverts	2	7.00	1.40	0.15	2.94			
		2	6.00	1.40	0.15	2.52			
						5.46	**Cum**	4479.56	24458.3976

6	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications. KBS 5.1.13. cement mortar 1:6(P.No.255, I.No.34.8.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	4596.00							
	6% AW	275.76							
	Sub Total	4871.76							
	Raising of Culverts	8	6	0.45	0.45	9.72			
						9.72	**Cum**	4871.76	47353.5072
7	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM, curing complete as per specifications.Specification No. KBS 4.1, 4.2(P.No 255, I.No.34.11 of PW,P&IWTD S.R 2018-19)								
	Basic rate	5283.00							
	6% AW	316.98							
	Sub Total	5599.98							
	Flagging Course								
	Raising of Culverts	8	6	0.45	0.1	2.16			
						2.16	**Cum**	5599.98	12095.9568
8	34.17 Providing and laying in position plain/Reinforced cement cement concrete M20 for sub structure/Superstructure works, with cement @ 320 kgs, 20 mm & down size graded granite metal coarse aggregate @ 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticisers @ 3 lts confirming to IS 9103-2008,concrete laid in layers, well compacted and providing weep holes wherever necessary. with necessary scaffolding, form work etc., including cost of labour, HOM curing etc., complete. (P.No.257, I.No.34.17 of PW, P&IWTD								
	Basic rate	4979							
	6% AW	298.74							
	Sub Total	5277.74							
	Raft								
	RCC Culvert								
	New Culverts	2	7.00	1.20	0.20	3.36			
		2	6.00	1.20	0.20	2.88			
	Side Wall								
	RCC Culvert								
	New Culverts	4	7.00	0.20	0.80	4.48			
		4	6.00	0.20	0.80	3.84			
						14.56	**Cum**	5277.74	76843.8944
9	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200.**TMT Bars Fe 500** (P.No.229, I.No.28.8.2 of PW, P&IWTD SR 2018-19)								
	Basic rate	68233.00							
	6% AW	4093.98							
	Sub Total	72326.98							
	Consider 80kg/Cum for Culvert	1	14.56	80		1.1648			
						1.16	**Tonne**	72326.98	83899.2968
10	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Data rate	5418.00							
	RCC Culvert								
	New Culverts	2	7.00	1.20		16.80			
		2	6.00	1.20		14.40			
	Damaged Slabs	2	6.00	1.50		18.00			
						49.2	**Sqm**	5418	266565.6
11	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301with 4km lead= (I No-19.14,P No-143)								
	Basic rate	41.00							
	5Km lead & Lift= (2*1.28*4)	10.24							

	Sub Total	51.24							
	6% AW	3.07							
	Total	54.31							
	Road Works								
	Muneshwara layout								
	WA037	2	105.00	1.20	0.30	75.6			
	W0039	1	130.00	5.50	0.30	214.5			
	W0043	2	235.00	1.20	0.30	169.2			
	W0047	2	230.00	1.20	0.30	165.6			
	W0049	2	225.00	1.20	0.30	162			
	W0022	1	100.00	5.50	0.30	165			
	Vijayanagar								
	WA019	2	630.00	1.20	0.30	453.6			
	W0020	2	145.00	1.20	0.30	104.4			
	W0016	2	105.00	1.20	0.30	75.6			
	W0014	1	80.00	5.50	0.30	132			
	W0010	2	95.00	1.20	0.30	68.4			
	W0008	2	70.00	1.20	0.30	50.4			
	STS Circle								
	W0349	1	160.00	5.50	0.30	264			
	W0261	1	65.00	7.30	0.30	142.35			
	W0237	1	230.00	5.50	0.30	379.5			
	WA235	1	145.00	4.80	0.30	208.8			
	W0024	2	110.00	1.20	0.30	79.2			
	W-Drive way road	2	230.00	1.20	0.30	165.6			
	7th Cross Road	2	220.00	1.20	0.30	158.4			
	Reva College Road								
	W0383	2	250.00	1.20	0.30	180			
	WA461	1	60.00	5.00	0.30	90			
	WA459	1	60.00	5.50	0.30	99			
	WA457	1	60.00	5.00	0.30	90			
	WD455	1	60.00	4.80	0.30	86.4			
	WK455	1	60.00	4.60	0.30	82.8			
	WC455	1	65.00	5.00	0.30	97.5			
	WB455	1	65.00	5.10	0.30	99.45			
	WA383	1	40.00	5.50	0.30	66			
	WB383	1	40.00	4.80	0.30	57.6			
	WA455	1	50.00	4.60	0.30	69			
	Olive Plant road								
	W0158	2	280.00	1.20	0.30	201.6			
	W0367	1	65.00	5.00	0.30	97.5			
	W0363	1	65.00	5.00	0.30	97.5			
	W0359	1	65.00	5.00	0.30	97.5			
	W0355	1	65.00	5.00	0.30	97.5			
	W0174	2	212.00	1.20	0.30	152.64			
	W0214	2	180.00	1.20	0.30	129.6			
	Cross Rd 1	2	187.00	1.20	0.30	134.64			
	Cross Rd 2	2	240.00	1.20	0.30	172.8			
						5433.18	**Cum**	54.31	295076.0058
12	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Basic rate	1888.00							
	6% AW	113.28							
	Sub Total	2001.28							
	Road Works								
	Muneshwara layout								
	WA037	2	105.00	1.20	0.25	63			
	W0039	1	130.00	5.50	0.25	178.75			

	W0043	2	235.00	1.20	0.25	141			
	W0047	2	230.00	1.20	0.25	138			
	W0049	2	225.00	1.20	0.25	135			
	W0022	1	100.00	5.50	0.25	137.5			
	Vijayanagar								
	WA019	2	630.00	1.20	0.25	378			
	W0020	2	145.00	1.20	0.25	87			
	W0016	2	105.00	1.20	0.25	63			
	W0014	1	80.00	5.50	0.25	110			
	W0010	2	95.00	1.20	0.25	57			
	W0008	2	70.00	1.20	0.25	42			
	STS Circle								
	W0349	1	160.00	5.50	0.25	220			
	W0261	1	65.00	7.30	0.25	118.625			
	W0237	1	230.00	5.50	0.25	316.25			
	WA235	1	145.00	4.80	0.25	174			
	W0024	2	110.00	1.20	0.25	66			
	W-Drive way road	2	230.00	1.20	0.25	138			
	7th Cross Road	2	220.00	1.20	0.25	132			
	Reva College Road								
	W0383	2	250.00	1.20	0.25	150			
	WA461	1	60.00	5.00	0.25	75			
	WA459	1	60.00	5.50	0.25	82.5			
	WA457	1	60.00	5.00	0.25	75			
	WD455	1	60.00	4.80	0.25	72			
	WK455	1	60.00	4.60	0.25	69			
	WC455	1	65.00	5.00	0.25	81.25			
	WB455	1	65.00	5.10	0.25	82.875			
	WA383	1	40.00	5.50	0.25	55			
	WB383	1	40.00	4.80	0.25	48			
	WA455	1	50.00	4.60	0.25	57.5			
	Olive Plant road								
	W0158	2	280.00	1.20	0.25	168			
	W0367	1	65.00	5.00	0.25	81.25			
	W0363	1	65.00	5.00	0.25	81.25			
	W0359	1	65.00	5.00	0.25	81.25			
	W0355	1	65.00	5.00	0.25	81.25			
	W0174	2	212.00	1.20	0.25	127.2			
	W0214	2	180.00	1.20	0.25	108			
	Cross Rd 1	2	187.00	1.20	0.25	112.2			
	Cross Rd 2	2	240.00	1.20	0.25	144			
						4527.65	**Cum**	2001.28	9061095.392
13	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kg\sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.158, I.No.21.6 of PW,P&IWTD SR 2018-19)								
	Basic rate	27							
	6% AW	1.62							
	Sub Total	28.62							
	Road Works								
	Muneshwara layout								
	WA037	2	105.00	1.20		252.00			
	W0039	1	130.00	5.50		715.00			
	W0043	2	235.00	1.20		564.00			
	W0047	2	230.00	1.20		552.00			
	W0049	2	225.00	1.20		540.00			
	W0022	1	100.00	5.50		550.00			
	Vijayanagar								
	WA019	2	630.00	1.20		1512.00			
	W0020	2	145.00	1.20		348.00			
	W0016	2	105.00	1.20		252.00			
	W0014	1	80.00	5.50		440.00			
	W0010	2	95.00	1.20		228.00			
	W0008	2	70.00	1.20		168.00			
	STS Circle								
	W0349	1	160.00	5.50		880.00			
	W0261	1	65.00	7.30		474.50			
	W0237	1	230.00	5.50		1265.00			
	WA235	1	145.00	4.80		696.00			
	W0024	2	110.00	1.20		264.00			
	W-Drive way road	2	230.00	1.20		552.00			

	7th Cross Road	2	220.00	1.20		528.00			
	Reva College Road								
	W0383	2	250.00	1.20		600.00			
	WA461	1	60.00	5.00		300.00			
	WA459	1	60.00	5.50		330.00			
	WA457	1	60.00	5.00		300.00			
	WD455	1	60.00	4.80		288.00			
	WK455	1	60.00	4.60		276.00			
	WC455	1	65.00	5.00		325.00			
	WB455	1	65.00	5.10		331.50			
	WA383	1	40.00	5.50		220.00			
	WB383	1	40.00	4.80		192.00			
	WA455	1	50.00	4.60		230.00			
	Olive Plant road								
	W0158	2	280.00	1.20		672.00			
	W0367	1	65.00	5.00		325.00			
	W0363	1	65.00	5.00		325.00			
	W0359	1	65.00	5.00		325.00			
	W0355	1	65.00	5.00		325.00			
	W0174	2	212.00	1.20		508.80			
	W0214	2	180.00	1.20		432.00			
	Cross Rd 1	2	187.00	1.20		448.80			
	Cross Rd 2	2	240.00	1.20		576.00			
					Sub Total	18110.6			
						18110.6	**Sqm**	28.62	518325.372
14	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.158, I.No.21.2 of PW,P&IWTD SR 2018-19)								
	Basic rate	5.00							
	Area Weightage 6%	0.30							
	Final Rate	5.30							
	Road Works								
	Muneshwara layout								
	WA037	1	105.00	5.40		567.00			
	W0043	1	235.00	6.00		1410.00			
	W0047	1	230.00	7.00		1610.00			
	W0049	1	225.00	5.00		1125.00			
	Vijayanagar								
	WA019	1	630.00	5.50		3465.00			
	W0020	1	145.00	5.40		783.00			
	W0016	1	105.00	5.60		588.00			
	W0010	1	95.00	5.70		541.50			
	W0008	1	70.00	5.10		357.00			
	W0006	1	85.00	6.30		535.50			
	W0024	1	110.00	5.50		605.00			
	W-Drive way road	1	230.00	5.50		1265.00			
	7th Cross Road	1	220.00	5.50		1210.00			
	Reva College Road								
	W0383	1	250.00	5.50		1375.00			
	Olive Plant road								
	W0158	1	280.00	5.50		1540.00			
	W0174	1	212.00	5.50		1166.00			
	W0214	1	180.00	5.50		990.00			
	Cross Rd 1	1	187.00	5.50		1028.50			
	Cross Rd 2	1	240.00	5.50		1320.00			
	deduct prime coat					-8997.6			
						12483.9	**Sqm**	5.3	66164.67
15	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.158 I.No.21.7 of PW,P&IWTD SR of 2018-19)								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Final Rate	12.72							
	Tack Coat For DBM								
	DBM								
	Road Works								

	Muneshwara layout								
	WA037	2	105.00	1.20		252.00			
	W0043	2	235.00	1.20		564.00			
	W0047	2	230.00	1.20		552.00			
	W0049	2	225.00	1.20		540.00			
	Vijayanagar								
	WA019	2	630.00	1.20		1512.00			
	W0020	2	145.00	1.20		348.00			
	W0016	2	105.00	1.20		252.00			
	W0010	2	95.00	1.20		228.00			
	W0008	2	70.00	1.20		168.00			
	W0237	1	230.00	5.50		1265.00			
	W0024	2	110.00	1.20		264.00			
	W-Drive way road	2	230.00	1.20		552.00			
	7th Cross Road	2	220.00	1.20		528.00			
	Reva College Road								
	W0383	2	250.00	1.20		600.00			
	Olive Plant road								
	W0158	2	280.00	1.20		672.00			
	W0174	2	212.00	1.20		508.80			
	W0214	2	180.00	1.20		432.00			
	Cross Rd 1	2	187.00	1.20		448.80			
	Cross Rd 2	2	240.00	1.20		576.00			
	Tack Coat For BC								
	Road Works								
	Muneshwara layout								
	WA037	1	105.00	5.40		567.00			
	W0039	1	130.00	5.50		715.00			
	W0043	1	235.00	6.00		1410.00			
	W0047	1	230.00	7.00		1610.00			
	W0049	1	225.00	5.00		1125.00			
	W0022	1	100.00	5.50		550.00			
	Vijayanagar								
	WA019	1	630.00	5.50		3465.00			
	W0020	1	145.00	5.40		783.00			
	W0016	1	105.00	5.60		588.00			
	W0014	1	80.00	5.50		440.00			
	W0010	1	95.00	5.70		541.50			
	W0008	1	70.00	5.10		357.00			
	W0006	1	85.00	6.30		535.50			
	STS Circle								
	W0349	1	160.00	5.50		880.00			
	W0261	1	65.00	7.30		474.50			
	W0237	1	230.00	5.50		1265.00			
	WA235	1	145.00	4.80		696.00			
	W0024	1	110.00	5.50		605.00			
	W-Drive way road	1	230.00	5.50		1265.00			
	7th Cross Road	1	220.00	5.50		1210.00			
	Reva College Road								
	W0383	1	250.00	5.50		1375.00			
	WA461	1	60.00	5.00		300.00			
	WA459	1	60.00	5.50		330.00			
	WA457	1	60.00	5.00		300.00			
	WD455	1	60.00	4.80		288.00			
	WK455	1	60.00	4.60		276.00			
	WC455	1	65.00	5.00		325.00			
	WB455	1	65.00	5.10		331.50			
	WA383	1	40.00	5.50		220.00			
	WB383	1	40.00	4.80		192.00			
	WA455	1	50.00	4.60		230.00			
	Olive Plant road								
	W0158	1	280.00	5.50		1540.00			
	W0367	1	65.00	5.00		325.00			
	W0363	1	65.00	5.00		325.00			
	W0359	1	65.00	5.00		325.00			
	W0355	1	65.00	5.00		325.00			
	W0174	1	212.00	5.50		1166.00			
	W0214	1	180.00	5.50		990.00			
	Cross Rd 1	1	187.00	5.50		1028.50			
	Cross Rd 2	1	240.00	5.50		1320.00			
						40857.1	**Sqm**	12.72	519702.312

16	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	6224.00							
	6% AW	373.44							
	Sub Total	6597.44							
	DBM								
	Road Works								
	Muneshwara layout								
	WA037	2	105.00	1.20	0.05	12.60			
	W0043	2	235.00	1.20	0.05	28.20			
	W0047	2	230.00	1.20	0.05	27.60			
	W0049	2	225.00	1.20	0.05	27.00			
	Vijayanagar								
	WA019	2	630.00	1.20	0.05	75.60			
	W0020	2	145.00	1.20	0.05	17.40			
	W0016	2	105.00	1.20	0.05	12.60			
	W0010	2	95.00	1.20	0.05	11.40			
	W0008	2	70.00	1.20	0.05	8.40			
	W0237	1	230.00	5.50	0.05	63.25			
	W0024	2	110.00	1.20	0.05	13.20			
	W-Drive way road	2	230.00	1.20	0.05	27.60			
	7th Cross Road	2	220.00	1.20	0.05	26.40			
	Reva College Road								
	W0383	2	250.00	1.20	0.05	30.00			
	Olive Plant road								
	W0158	2	280.00	1.20	0.05	33.60			
	W0174	2	212.00	1.20	0.05	25.44			
	W0214	2	180.00	1.20	0.05	21.60			
	Cross Rd 1	2	187.00	1.20	0.05	22.44			
	Cross Rd 2	2	240.00	1.20	0.05	28.80			
						513.13	**Cum**	6597.44	3385344.387
17	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No.171, I.No.21.78.12 of PW,P&IWTD SR 2018-19) As per Issue rate dated: 03/01/2020								
	Basic rate (Issue Rate)	7315.00							
	6% AW	438.90							
	Sub Total	7753.90							
	Road Works								
	Muneshwara layout								
	WA037	1	105.00	5.40	0.04	22.68			
	W0039	1	130.00	5.50	0.04	28.60			
	W0043	1	235.00	6.00	0.04	56.40			
	W0047	1	230.00	7.00	0.04	64.40			
	W0049	1	225.00	5.00	0.04	45.00			
	W0022	1	100.00	5.50	0.04	22.00			
	Vijayanagar								
	WA019	1	630.00	5.50	0.04	138.60			
	W0020	1	145.00	5.40	0.04	31.32			
	W0016	1	105.00	5.60	0.04	23.52			
	W0014	1	80.00	5.50	0.04	17.60			
	W0010	1	95.00	5.70	0.04	21.66			
	W0008	1	70.00	5.10	0.04	14.28			
	W0006	1	85.00	6.30	0.04	21.42			
	STS Circle								
	W0349	1	160.00	5.50	0.04	35.20			
	W0261	1	65.00	7.30	0.04	18.98			
	W0237	1	230.00	5.50	0.04	50.60			
	WA235	1	145.00	4.80	0.04	27.84			
	W0024	1	110.00	5.50	0.04	24.20			

	W-Drive way road	1	230.00	5.50	0.04	50.60			
	7th Cross Road	1	220.00	5.50	0.04	48.40			
	Reva College Road								
	W0383	1	250.00	5.50	0.04	55.00			
	WA461	1	60.00	5.00	0.04	12.00			
	WA459	1	60.00	5.50	0.04	13.20			
	WA457	1	60.00	5.00	0.04	12.00			
	WD455	1	60.00	4.80	0.04	11.52			
	WK455	1	60.00	4.60	0.04	11.04			
	WC455	1	65.00	5.00	0.04	13.00			
	WB455	1	65.00	5.10	0.04	13.26			
	WA383	1	40.00	5.50	0.04	8.80			
	WB383	1	40.00	4.80	0.04	7.68			
	WA455	1	50.00	4.60	0.04	9.20			
	Olive Plant road								
	W0158	1	280.00	5.50	0.04	61.60			
	W0367	1	65.00	5.00	0.04	13.00			
	W0363	1	65.00	5.00	0.04	13.00			
	W0359	1	65.00	5.00	0.04	13.00			
	W0355	1	65.00	5.00	0.04	13.00			
	W0174	1	212.00	5.50	0.04	46.64			
	W0214	1	180.00	5.50	0.04	39.60			
	Cross Rd 1	1	187.00	5.50	0.04	41.14			
	Cross Rd 2	1	240.00	5.50	0.04	52.80			
						1223.78	**Cum**	7753.9	9489067.742
18	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	6% AW	25.74							
	Sub Total	454.74							
	Center Line	0.50	5564.00	0.10		278.20			
	Edge Line	2.00	5354.00	0.10		1070.80			
						1349	**Sqm**	454.74	613444.26
								Total Construction Cost	**25151790.05**
19								**12% GST to Construction Cost**	**3018214.81**
20								**5% Tender Premium**	**1257589.50**
21								**Cost towards Preparation of DPR LS**	**281701.00**
22								**Cost towards PMC / Third Party inspection LS**	**281701.00**
								Sub Total	**29990996.36**
23								**Miscellaneous and rounding off**	**9003.64**
								TOTAL	**30000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates

Tejus Consultants

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer,
BBMP Bangalore

Executive Engineer,
BBMP Bangalore

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಡರಾಯನಪುರ ವಿಧಾನ ಯಲಹಂಕ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ಬೆಂಗಳೂರು-560092.

Bruhat Bangalore Mahanagara Palike

Name of Work: Improvements to roads and drains at Dwarkanagar and surrounding area in Ward No 05 Byatarayanapura sub division

Est Cost: =300.00Lakhs

Sl No	Description of Items	No	Length m	Width m	Depth m	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5=69.80								
	Basic rate	130.00							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	199.80							
	6% AW	11.99							
	Total	211.79							
	Desilt								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	2	100.00	0.60	0.35	42.00			
	2nd Cross Rd W0175	2	100.00	0.60	0.35	42.00			
	3rd Cross Rd W0173	2	90.00	0.60	0.35	37.80			
	Main Rd 1 - W0173	1	105.00	0.60	0.35	22.05			
	Datta Layout								
	W0026	2	45.00	0.60	0.35	18.90			
	W0063	2	155.00	0.60	0.35	65.10			
	W0061	2	130.00	0.60	0.35	54.60			
	W0055	2	115.00	0.60	0.35	48.30			
		1	245.00	0.60	0.35	51.45			
	Muneshwara Layout								
	W0022	2	150.00	0.60	0.35	63.00			
	W0033	2	60.00	0.60	0.35	25.20			
	W0037	2	115.00	0.60	0.35	48.30			
		2	70.00	0.60	0.35	29.40			
	W0039	2	130.00	0.60	0.35	54.60			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	0.60	0.35	447.30			
	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	0.60	0.35	77.70			
	2nd Cross Rd	2	175.00	0.60	0.35	73.50			
	3rd Cross Rd	2	225.00	0.60	0.35	94.50			
	4th Cross Rd	2	240.00	0.60	0.35	100.80			
	5th Cross Rd	2	180.00	0.60	0.35	75.60			
	6th Cross Rd	2	165.00	0.60	0.35	69.30			
	7th Cross Rd	2	175.00	0.60	0.35	73.50			
	8th Cross Rd	2	145.00	0.60	0.35	60.90			
	9th Cross Rd	2	114.00	0.60	0.35	47.88			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	0.60	0.35	71.40			
	2nd Cross Rd	2	145.00	0.60	0.35	60.90			
	3rd Cross Rd	2	135.00	0.60	0.35	56.70			
	4th Cross Rd	2	140.00	0.60	0.35	58.80			
	5th Cross Rd	2	165.00	0.60	0.35	69.30			
	6th Cross Rd	2	108.00	0.60	0.35	45.36			
	7th Cross Rd	2	80.00	0.60	0.35	33.60			
	Culverts								
	Cross Culverts	3	6.00	0.80	0.80	11.52			
	RCC Culvert								
	New Culverts	2	7.00	1.40	1.15	22.54			
		2	6.00	1.40	1.15	19.32			
						2173.12	**Cum**	**211.79**	**460245.08**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27, I.No.5.33 of PW, P&IWTD SR 2018-19)								

	Basic rate	105.00							
	6% AW	6.30							
	Total	111.30							
	Desilt								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	1	100.00	1.35		135.00			
	2nd Cross Rd W0175	2	100.00	1.35		270.00			
	3rd Cross Rd W0173	2	90.00	1.35		243.00			
	Main Rd 1 - W0173	1	105.00	1.35		141.75			
	Datta Layout								
	W0026	2	45.00	1.35		121.50			
	W0063	2	155.00	1.35		418.50			
	W0061	2	130.00	1.35		351.00			
	W0055	2	115.00	1.35		310.50			
		1	245.00	1.35		330.75			
	Muneshwara Layout								
	W0022	2	150.00	1.35		405.00			
	W0033	2	60.00	1.35		162.00			
	W0037	2	115.00	1.35		310.50			
		2	70.00	1.35		189.00			
	W0039	2	130.00	1.35		351.00			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	1.35		2875.50			
	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	1.35		499.50			
	2nd Cross Rd	2	175.00	1.35		472.50			
	3rd Cross Rd	2	225.00	1.35		607.50			
	4th Cross Rd	2	240.00	1.35		648.00			
	5th Cross Rd	2	180.00	1.35		486.00			
	6th Cross Rd	2	165.00	1.35		445.50			
	7th Cross Rd	2	175.00	1.35		472.50			
	8th Cross Rd	2	145.00	1.35		391.50			
	9th Cross Rd	2	114.00	1.35		307.80			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	1.35		459.00			
	2nd Cross Rd	2	145.00	1.35		391.50			
	3rd Cross Rd	2	135.00	1.35		364.50			
	4th Cross Rd	2	140.00	1.35		378.00			
	5th Cross Rd	2	165.00	1.35		445.50			
	6th Cross Rd	2	108.00	1.35		291.60			
	7th Cross Rd	2	80.00	1.35		216.00			
	Culvert Slab	3	6.00	1.50		27.00			
						13518.90			
	Consider 15%					2027.84			
	deduct damaged / missing slab 10%					-202.78			
						1825.05	**Sqm**	**111.30**	**203128.07**
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.27, I.No.5.31.1 of PW, P&IWTD SR 2018-19)								
	Basic rate	700.00							
	6% AW	42.00							
	Sub Total	742.00							
	Add damaged / missing slab 10%					202.78			
						202.78	**Sqm**	**742.00**	**150462.76**
4	KSRRB M2900-1. Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials, labour, HOM complete as per specifications. MORTH Specification No. 408 (P.No.254, I.No.34.1 of PW,P&IWTD S.R 2018-19)								
	Basic rate	4226.00							
	6% AW	253.56							
	Sub Total	4479.56							
	RCC Culvert								
	New Culverts	2	7.00	1.40	0.15	2.94			

		2	6.00	1.40	0.15	2.52			
						5.46	**Cum**	**4479.56**	**24,458.40**
5	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications. KBS 5.1.13. cement mortar 1:6(P.No.255, I.No.34.8.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	4596.00							
	6% AW	275.76							
	Sub Total	4871.76							
	Raising of Culverts	6	6.00	0.45	0.45	7.29			
						7.29	**Cum**	**4871.76**	**35,515.13**
6	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM, curing complete as per specifications.Specification No. KBS 4.1, 4.2(P.No 255, I.No.34.11 of PW,P&IWTD S.R 2018-19)								
	Basic rate	5283.00							
	6% AW	316.98							
	Sub Total	5599.98							
	Flagging Course								
	Raising of Culverts	6	6.00	0.45	0.10	1.62			
						1.62	**Cum**	**5599.98**	**9,071.97**
7	34.17 Providing and laying in position plain/Reinforced cement cement concrete M20 for sub structure/Superstructure works, with cement @ 320 kgs, 20 mm & down size graded granite metal coarse aggregate @ 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticisers @ 3 lts confirming to IS 9103-2008,concrete laid in layers, well compacted and providing weep holes wherever necessary. with necessary scaffolding, form work etc., including cost of labour, HOM curing etc., complete. (P.No.257, I.No.34.17 of PW, P&IWTD SR 2018-19)								
	Basic rate	4979.00							
	6% AW	298.74							
	Sub Total	5277.74							
	Raft								
	RCC Culvert								
	New Culverts	2	7.00	1.20	0.20	3.36			
		2	6.00	1.20	0.20	2.88			
	Side Wall								
	RCC Culvert								
	New Culverts	4	7.00	0.20	0.80	4.48			
		4	6.00	0.20	0.80	3.84			
						14.56	**Cum**	**5277.74**	**76,843.89**
8	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200.**TMT Bars Fe 500** (P.No.229, I.No.28.8.2 of PW, P&IWTD SR 2018-19)								
	Basic rate	68233.00							
	6% AW	4093.98							
	Sub Total	72326.98							
	Consider 80kg/Cum for Culvert	1	14.56	80.00		1.16			
						1.16	**Tonne**	**72326.98**	**83,899.30**
9	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Data rate	5418.00							
	RCC Culvert								

	New Culverts	2	7.00	1.20		16.80			
		2	6.00	1.20		14.40			
	Damaged Slabs	5	6.00	1.50		45.00			
						76.20	**Sqm**	**5418.00**	**412851.60**
10	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301with 4km lead= (I No-19.14,P No-143)								
	Basic rate	41.00							
	5Km lead & Lift= (2*1.28*4)	10.24							
	Sub Total	51.24							
	6% AW	3.07							
	Total	54.31							
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	2	100.00	1.20	0.30	72.00			
	2nd Cross Rd W0175	2	100.00	1.20	0.30	72.00			
	3rd Cross Rd W0173	2	90.00	1.20	0.30	64.80			
	Main Rd 1 - W0173	2	105.00	1.20	0.30	75.60			
	Belahalli Village								
	W0474	1	100.00	5.50	0.30	165.00			
	Datta Layout								
	W0026	2	45.00	1.20	0.30	32.40			
	W0063	2	155.00	1.20	0.30	111.60			
	W0061	2	130.00	1.20	0.30	93.60			
	W0055	2	115.00	1.20	0.30	82.80			
		2	245.00	1.20	0.30	176.40			
	Muneshwara Layout								
	W0022	1	150.00	7.50	0.30	337.50			
	W0033	1	60.00	7.20	0.30	129.60			
	W0037	1	115.00	5.50	0.30	189.75			
		1	70.00	5.50	0.30	115.50			
	W0039	1	130.00	5.50	0.30	214.50			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	1.20	0.30	766.80			
	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	1.20	0.30	133.20			
	2nd Cross Rd	2	175.00	1.20	0.30	126.00			
	3rd Cross Rd	2	225.00	1.20	0.30	162.00			
	4th Cross Rd	2	240.00	1.20	0.30	172.80			
	5th Cross Rd	2	180.00	1.20	0.30	129.60			
	6th Cross Rd	2	165.00	1.20	0.30	118.80			
	7th Cross Rd	2	175.00	1.20	0.30	126.00			
	8th Cross Rd	2	145.00	1.20	0.30	104.40			
	9th Cross Rd	2	114.00	1.20	0.30	82.08			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	1.20	0.30	122.40			
	2nd Cross Rd	2	145.00	1.20	0.30	104.40			
	3rd Cross Rd	2	135.00	1.20	0.30	97.20			
	4th Cross Rd	2	140.00	1.20	0.30	100.80			
	5th Cross Rd	2	165.00	1.20	0.30	118.80			
	6th Cross Rd	2	108.00	1.20	0.30	77.76			
	7th Cross Rd	2	80.00	1.20	0.30	57.60			
						4533.69	**Cum**	**54.31**	**246224.70**
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								

	Basic rate	1888.00							
	6% AW	113.28							
	Sub Total	2001.28							
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	2	100.00	1.20	0.25	60.00			
	2nd Cross Rd W0175	2	100.00	1.20	0.25	60.00			
	3rd Cross Rd W0173	2	90.00	1.20	0.25	54.00			
	Main Rd 1 - W0173	2	105.00	1.20	0.25	63.00			
	Belahalli Village								
	W0474	1	100.00	5.50	0.25	137.50			
	Datta Layout								
	W0026	2	45.00	1.20	0.25	27.00			
	W0063	2	155.00	1.20	0.25	93.00			
	W0061	2	130.00	1.20	0.25	78.00			
	W0055	2	115.00	1.20	0.25	69.00			
		2	245.00	1.20	0.25	147.00			
	Muneshwara Layout								
	W0022	1	150.00	7.50	0.25	281.25			
	W0033	1	60.00	7.20	0.25	108.00			
	W0037	1	115.00	5.50	0.25	158.13			
		1	70.00	5.50	0.25	96.25			
	W0039	1	130.00	5.50	0.25	178.75			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	1.20	0.25	639.00			
	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	1.20	0.25	111.00			
	2nd Cross Rd	2	175.00	1.20	0.25	105.00			
	3rd Cross Rd	2	225.00	1.20	0.25	135.00			
	4th Cross Rd	2	240.00	1.20	0.25	144.00			
	5th Cross Rd	2	180.00	1.20	0.25	108.00			
	6th Cross Rd	2	165.00	1.20	0.25	99.00			
	7th Cross Rd	2	175.00	1.20	0.25	105.00			
	8th Cross Rd	2	145.00	1.20	0.25	87.00			
	9th Cross Rd	2	114.00	1.20	0.25	68.40			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	1.20	0.25	102.00			
	2nd Cross Rd	2	145.00	1.20	0.25	87.00			
	3rd Cross Rd	2	135.00	1.20	0.25	81.00			
	4th Cross Rd	2	140.00	1.20	0.25	84.00			
	5th Cross Rd	2	165.00	1.20	0.25	99.00			
	6th Cross Rd	2	108.00	1.20	0.25	64.80			
	7th Cross Rd	2	80.00	1.20	0.25	48.00			
						3778.08	**Cum**	**2001.28**	**7560995.94**
12	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kg\sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.158, I.No.21.6 of PW,P&IWTD SR 2018-19)								
	Basic rate	27							
	6% AW	1.62							
	Sub Total	28.62							
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	2	100.00	1.20		240.00			
	2nd Cross Rd W0175	2	100.00	1.20		240.00			
	3rd Cross Rd W0173	2	90.00	1.20		216.00			
	Main Rd 1 - W0173	2	105.00	1.20		252.00			
	Belahalli Village								
	W0474	1	100.00	5.50		550.00			
	Datta Layout								
	W0026	2	45.00	1.20		108.00			
	W0063	2	155.00	1.20		372.00			
	W0061	2	130.00	1.20		312.00			

	W0055								
		2	115.00	1.20		276.00			
		2	245.00	1.20		588.00			
	Muneshwara Layout								
	W0022	1	150.00	7.50		1125.00			
	W0033	1	60.00	7.20		432.00			
	W0037	1	115.00	5.50		632.50			
		1	70.00	5.50		385.00			
	W0039	1	130.00	5.50		715.00			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	1.20		2556.00			
	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	1.20		444.00			
	2nd Cross Rd	2	175.00	1.20		420.00			
	3rd Cross Rd	2	225.00	1.20		540.00			
	4th Cross Rd	2	240.00	1.20		576.00			
	5th Cross Rd	2	180.00	1.20		432.00			
	6th Cross Rd	2	165.00	1.20		396.00			
	7th Cross Rd	2	175.00	1.20		420.00			
	8th Cross Rd	2	145.00	1.20		348.00			
	9th Cross Rd	2	114.00	1.20		273.60			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	1.20		408.00			
	2nd Cross Rd	2	145.00	1.20		348.00			
	3rd Cross Rd	2	135.00	1.20		324.00			
	4th Cross Rd	2	140.00	1.20		336.00			
	5th Cross Rd	2	165.00	1.20		396.00			
	6th Cross Rd	2	108.00	1.20		259.20			
	7th Cross Rd	2	80.00	1.20		192.00			
					Total	**15112.3**	**Sqm**	**28.62**	**432514.03**
13	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.158, I.No.21.2 of PW,P&IWTD SR 2018-19)								
	Basic rate	5.00							
	Area Weightage 6%	0.30							
	Final Rate	5.30							
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	1	100.00	5.50		550.00			
	2nd Cross Rd W0175	1	100.00	5.50		550.00			
	3rd Cross Rd W0173	1	90.00	5.50		495.00			
	Main Rd 1 - W0173	1	105.00	5.50		577.50			
	Belahalli Village								
	W0831	1	100.00	5.50		550.00			
	W0474	1	100.00	5.50		550.00			
	Datta Layout								
	W0026	1	45.00	7.50		337.50			
	W0063	1	155.00	7.50		1162.50			
	W0061	1	130.00	7.70		1001.00			
	W0055	1	115.00	8.00		920.00			
		1	245.00	7.00		1715.00			
	Muneshwara Layout								
	W0022	1	150.00	7.50		1125.00			
	W0033	1	60.00	7.20		432.00			
	W0037	1	115.00	5.50		632.50			
		1	70.00	5.50		385.00			
	W0039	1	130.00	5.50		715.00			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	1	1065.00	7.50		7987.50			
	Kattigenahalli Surroundings								
	1st Cross Rd	1	185.00	5.50		1017.50			
	2nd Cross Rd	1	175.00	5.50		962.50			
	3rd Cross Rd	1	225.00	5.50		1237.50			

	4th Cross Rd	1	240.00	5.50		1320.00			
	5th Cross Rd	1	180.00	5.50		990.00			
	6th Cross Rd	1	165.00	5.50		907.50			
	7th Cross Rd	1	175.00	5.50		962.50			
	8th Cross Rd	1	145.00	5.50		797.50			
	9th Cross Rd	1	114.00	5.50		627.00			
	MCECHS layout Surroundings								
	1st Cross Rd	1	170.00	5.50		935.00			
	2nd Cross Rd	1	145.00	5.50		797.50			
	3rd Cross Rd	1	135.00	5.50		742.50			
	4th Cross Rd	1	140.00	5.50		770.00			
	5th Cross Rd	1	165.00	5.50		907.50			
	6th Cross Rd	1	108.00	5.50		594.00			
	7th Cross Rd	1	80.00	5.50		440.00			
	deduct prime coat					-15112.3			
						18581.7	**Sqm**	**5.30**	**98,483.01**
14	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.158 I.No.21.7 of PW,P&IWTD SR of 2018-19)								
	Basic rate	12.00							
	Area Weightage 6%	0.72							
	Final Rate	12.72							
	Tack Coat For DBM								
	DBM								
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	2	100.00	1.20		240.00			
	2nd Cross Rd W0175	2	100.00	1.20		240.00			
	3rd Cross Rd W0173	2	90.00	1.20		216.00			
	Main Rd 1 - W0173	2	105.00	1.20		252.00			
	Belahalli Village								
	Datta Layout								
	W0026	2	45.00	1.20		108.00			
	W0063	2	155.00	1.20		372.00			
	W0061	2	130.00	1.20		312.00			
	W0055	2	115.00	1.20		276.00			
		2	245.00	1.20		588.00			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	1.20		2556.00			
	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	1.20		444.00			
	2nd Cross Rd	2	175.00	1.20		420.00			
	3rd Cross Rd	2	225.00	1.20		540.00			
	4th Cross Rd	2	240.00	1.20		576.00			
	5th Cross Rd	2	180.00	1.20		432.00			
	6th Cross Rd	2	165.00	1.20		396.00			
	7th Cross Rd	2	175.00	1.20		420.00			
	8th Cross Rd	2	145.00	1.20		348.00			
	9th Cross Rd	2	114.00	1.20		273.60			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	1.20		408.00			
	2nd Cross Rd	2	145.00	1.20		348.00			
	3rd Cross Rd	2	135.00	1.20		324.00			
	4th Cross Rd	2	140.00	1.20		336.00			
	5th Cross Rd	2	165.00	1.20		396.00			
	6th Cross Rd	2	108.00	1.20		259.20			
	7th Cross Rd	2	80.00	1.20		192.00			
	Tack Coat For BC								
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	1	100.00	5.50		550.00			
	2nd Cross Rd W0175	1	100.00	5.50		550.00			

	3rd Cross Rd W0173	1	90.00	5.50		495.00			
	Main Rd 1 - W0173	1	105.00	5.50		577.50			
	Belahalli Village								
	W0474	1	100.00	5.50		550.00			
	W0831	1	100.00	5.50		550.00			
	Datta Layout								
	W0026	1	45.00	7.50		337.50			
	W0063	1	155.00	7.50		1162.50			
	W0061	1	130.00	7.70		1001.00			
	W0055	1	115.00	8.00		920.00			
		1	245.00	7.00		1715.00			
	Muneshwara Layout								
	W0022	1	150.00	7.50		1125.00			
	W0033	1	60.00	7.20		432.00			
	W0037	1	115.00	5.50		632.50			
		1	70.00	5.50		385.00			
	W0039	1	130.00	5.50		715.00			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	1	1065.00	7.50		7987.50			
	Kattigenahalli Surroundings								
	1st Cross Rd	1	185.00	5.50		1017.50			
	2nd Cross Rd	1	175.00	5.50		962.50			
	3rd Cross Rd	1	225.00	5.50		1237.50			
	4th Cross Rd	1	240.00	5.50		1320.00			
	5th Cross Rd	1	180.00	5.50		990.00			
	6th Cross Rd	1	165.00	5.50		907.50			
	7th Cross Rd	1	175.00	5.50		962.50			
	8th Cross Rd	1	145.00	5.50		797.50			
	9th Cross Rd	1	114.00	5.50		627.00			
	MCECHS layout Surroundings								
	1st Cross Rd	1	170.00	5.50		935.00			
	2nd Cross Rd	1	145.00	5.50		797.50			
	3rd Cross Rd	1	135.00	5.50		742.50			
	4th Cross Rd	1	140.00	5.50		770.00			
	5th Cross Rd	1	165.00	5.50		907.50			
	6th Cross Rd	1	108.00	5.50		594.00			
	7th Cross Rd	1	80.00	5.50		440.00			
						44966.8	**Sqm**	**12.72**	**571977.70**
15	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	6224.00							
	6% AW	373.44							
	Sub Total	6597.44							
	DBM								
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	2	100.00	1.20	0.05	12.00			
	2nd Cross Rd W0175	2	100.00	1.20	0.05	12.00			
	3rd Cross Rd W0173	2	90.00	1.20	0.05	10.80			
	Main Rd 1 - W0173	2	105.00	1.20	0.05	12.60			
	Datta Layout								
	W0026	2	45.00	1.20	0.05	5.40			
	W0063	2	155.00	1.20	0.05	18.60			
	W0061	2	130.00	1.20	0.05	15.60			
	W0055	2	115.00	1.20	0.05	13.80			
		2	245.00	1.20	0.05	29.40			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	2	1065.00	1.20	0.05	127.80			

	Kattigenahalli Surroundings								
	1st Cross Rd	2	185.00	1.20	0.05	22.20			
	2nd Cross Rd	2	175.00	1.20	0.05	21.00			
	3rd Cross Rd	2	225.00	1.20	0.05	27.00			
	4th Cross Rd	2	240.00	1.20	0.05	28.80			
	5th Cross Rd	2	180.00	1.20	0.05	21.60			
	6th Cross Rd	2	165.00	1.20	0.05	19.80			
	7th Cross Rd	2	175.00	1.20	0.05	21.00			
	8th Cross Rd	2	145.00	1.20	0.05	17.40			
	9th Cross Rd	2	114.00	1.20	0.05	13.68			
	MCECHS layout Surroundings								
	1st Cross Rd	2	170.00	1.20	0.05	20.40			
	2nd Cross Rd	2	145.00	1.20	0.05	17.40			
	3rd Cross Rd	2	135.00	1.20	0.05	16.20			
	4th Cross Rd	2	140.00	1.20	0.05	16.80			
	5th Cross Rd	2	165.00	1.20	0.05	19.80			
	6th Cross Rd	2	108.00	1.20	0.05	12.96			
	7th Cross Rd	2	80.00	1.20	0.05	9.60			
						563.64	**Cum**	**6597.44**	**3718581.08**
16	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No.171, I.No.21.78.12 of PW,P&IWTD SR 2018-19) As per Issue rate dated: 03/01/2020								
	Basic rate (Issue Rate)	7315.00							
	6% AW	438.90							
	Sub Total	7753.90							
	Road Works								
	Balaji Enclave Dwarka nagar								
	1st Cross Road W0177	1	100.00	5.50	0.04	22.00			
	2nd Cross Rd W0175	1	100.00	5.50	0.04	22.00			
	3rd Cross Rd W0173	1	90.00	5.50	0.04	19.80			
	Main Rd 1 - W0173	1	105.00	5.50	0.04	23.10			
	Belahalli Village								
	W0474	1	100.00	5.50	0.04	22.00			
	W0831	1	100.00	5.50	0.04	22.00			
	Datta Layout								
	W0026	1	45.00	7.50	0.04	13.50			
	W0063	1	155.00	7.50	0.04	46.50			
	W0061	1	130.00	7.70	0.04	40.04			
	W0055	1	115.00	8.00	0.04	36.80			
		1	245.00	7.00	0.04	68.60			
	Muneshwara Layout								
	W0022	1	150.00	7.50	0.04	45.00			
	W0033	1	60.00	7.20	0.04	17.28			
	W0037	1	115.00	5.50	0.04	25.30			
		1	70.00	5.50	0.04	15.40			
	W0039	1	130.00	5.50	0.04	28.60			
	Kattigenahalli Govt School to palanahalli Mn Rd upto lake w0090	1	1065.00	7.50	0.04	319.50			
	Kattigenahalli Surroundings								
	1st Cross Rd	1	185.00	5.50	0.04	40.70			
	2nd Cross Rd	1	175.00	5.50	0.04	38.50			
	3rd Cross Rd	1	225.00	5.50	0.04	49.50			
	4th Cross Rd	1	240.00	5.50	0.04	52.80			
	5th Cross Rd	1	180.00	5.50	0.04	39.60			
	6th Cross Rd	1	165.00	5.50	0.04	36.30			
	7th Cross Rd	1	175.00	5.50	0.04	38.50			
	8th Cross Rd	1	145.00	5.50	0.04	31.90			

	9th Cross Rd	1	114.00	5.50	0.04	25.08			
	MCECHS layout Surroundings								
	1st Cross Rd	1	170.00	5.50	0.04	37.40			
	2nd Cross Rd	1	145.00	5.50	0.04	31.90			
	3rd Cross Rd	1	135.00	5.50	0.04	29.70			
	4th Cross Rd	1	140.00	5.50	0.04	30.80			
	5th Cross Rd	1	165.00	5.50	0.04	36.30			
	6th Cross Rd	1	108.00	5.50	0.04	23.76			
	7th Cross Rd	1	80.00	5.50	0.04	17.60			
						1347.76	**Cum**	**7753.90**	**10450396.26**
17	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	6% AW	25.74							
	Sub Total	454.74							
	Center Line	0.50	5422.00	0.10		271.10			
	Edge Line	2	5422.00	0.10		1084.40			
						1355.5	**Sqm**	**454.74**	**616400.07**
								Total Construction Cost	**25152048.99**
								12% GST to Construction Cost	**3018245.88**
18								**5% Tender Premium**	**1257602.45**
19								**Cost towards Preparation of DPR LS**	**281703.00**
20								**Cost towards PMC / Third Party inspection LS**	**281703.00**
21								**Sub Total**	**29991303.32**
								Miscellaneous and rounding off	**8696.68**
22								**TOTAL**	**30000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates

Tejus Consultants

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer,
BBMP Bangalore

Executive Engineer
BBMP Bangalore

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